

Fact Sheet



For Final Renewal Permitting Action Under 45CSR30 and Title V of the Clean Air Act

Permit Number: **R30-02100010-2011**

Application Received: **February 18, 2011**

Plant Identification Number: **03-054-021-00010**

Permittee: **Equitrans, LP**

Facility Name: **Glenville Compressor Station #37**

Mailing Address: **625 Liberty Avenue, Suite 1700, Pittsburgh, PA 15222**

Physical Location:	Glenville, Gilmer County, West Virginia
UTM Coordinates:	515.90 km Easting • 4420.84 km Northing • Zone 17
Directions:	Interstate 79 North to the Burnsville exit (Number 79). Take Route 5 North towards Glenville. Station is on left very near the intersection of Routes 5 and 19 (approximately 16 miles on Route 5).

Facility Description

The Glenville Compressor Station #37 is a natural gas transmission facility covered by Standard Industrial Classification (SIC) 4922. The station has the potential to operate seven (7) days per week, twenty-four (24) hours per day. The station consists of three (3) 300-hp natural gas internal combustion reciprocating engines, one (1) heating boiler, one (1) hot water tank, one (1) electric generator, two (2) 4000 gallon storage tanks containing oil and pipeline condensates, exclusively, and two (2) 300 gallon tanks containing scrubber oil.

Emissions Summary

Plantwide Emissions Summary [Tons per Year]			
Regulated Pollutants	2006 Potential Emissions ⁸	2011 Potential Emissions ⁹	2009 Actual Emissions ⁵
Carbon Monoxide (CO)	105.2	40.9	101.1
Nitrogen Oxides (NO _x)	208.5	140	60.2
Particulate Matter (PM ₁₀)	0.613	2.07	0.3
Total Particulate Matter (TSP) ¹	0.613	2.07	0.3
Sulfur Dioxide (SO ₂)	0.036	2.99×10^{-2}	0.0
Volatile Organic Compounds (VOC)	5.083	4.96	1.66 ⁷
Hazardous Air Pollutants	Potential Emissions	Potential Emissions	2009 Actual Emissions
Total HAPs ^{2, 3}	4.02	3.36	0.55 ⁶
Regulated Pollutants other than Criteria and HAPs ⁴	Potential Emissions	Potential Emissions	2009 Actual Emissions
Carbon Equivalent Emissions (CO ₂ e)	Not available	6,065	Not available

¹ PM₁₀ is a component of TSP.

² Some of the above HAPs may be counted as PM or VOCs.

³ Speciated HAPs are listed in Attachment F of the application.

⁴ This information was provided by the permittee in the application.

⁵ With the exception of VOC, this data was transcribed from the 2010 Certified Emissions Statement (CES) Invoice, and represents emissions from January 1, 2009 through December 31, 2009.

⁶ Comprised entirely of formaldehyde according to the 2010 CES.

⁷ According to technical correspondence¹, the 80.3 tpy of VOC reported on the 2010 CES invoice is incorrect due to an apparent typographical error in the emission factor used. The AP-42 emission factor for the compressor engines and the generator was incorrectly used as 2.96 lb/MMBtu instead of 2.96×10^{-2} lb/MMBtu. With this correction, the actual VOC emissions of the station should have been reported as 1.66 tpy.

⁸ The 2006 PTEs are transcribed from the Fact Sheet for permit R30-02100010-2006.

⁹ The 2011 PTEs are transcribed from the application for this renewal permit. The permittee has provided the following explanation in technical correspondence²: "The decrease in PTE for CO, NO_x, PM₁₀, SO₂, VOC, and HAP are all due to changes in emission calculation methodology and the removal of engine C-004. The removal of engine C-004 accounts for a large portion of the change in PTE. The compressor engines' contribution accounts for almost all of the site-wide emissions at the Glenville Station. As such, it is expected that by removing this unit, emissions should decrease by about 25%. Also, in the 2006 renewal application and 1996 AIR4 application, AP-42 emission factors for 4-stroke lean-burn engines were used for the compressors. For the 2011 renewal application, this was determined to be done in error; the compressors are in fact 2-stroke engines and as such, the 2-stroke lean burn factors were determined to be more appropriate. Emissions from 2SLB engines are significantly lower than 4SLB engines, resulting in a reduction in the calculated PTE for the station. When comparing the 2006 renewal application PTE values to the 1996 AIR4 report, there also appears to be an error in the CO PTE reported in 2006. While the PTE values for all other pollutants remained the same between 1996 and 2006, CO emissions increased by over 75 tpy. When comparing the 2011 renewal application PTE for CO to the 1996 value, there is actually a slight increase in CO in the 2011 application. This is expected since the 2SLB emission factor for CO is greater than the 4SLB factor. Lastly, the rating of the generator was incorrectly stated as 250 hp in the previous emission calculations. According to the manufacturer's spec sheet, the rating is actually 147 hp which resulted in a further decrease in calculated PTE. Combined, all of these changes caused a significant decrease in the calculated PTE of the Glenville Station as reflected in the 2011 renewal application versus those shown in the previous renewal."

¹ Email dated March 24, 2011 from Mr. Jerry McGinnis, Supervisor, Environmental for the permittee.

² Email dated March 24, 2011 from Mr. Jerry McGinnis, Supervisor, Environmental for the permittee.

Title V Program Applicability Basis

This facility has the potential to emit 140 tons per year of Nitrogen Oxides (NO_x). Due to this facility's potential to emit over 100 tons per year of criteria pollutant, Equitrans, LP is required to have an operating permit pursuant to Title V of the Federal Clean Air Act as amended and 45CSR30.

Legal and Factual Basis for Permit Conditions

The State and Federally-enforceable conditions of the Title V Operating Permits are based upon the requirements of the State of West Virginia Operating Permit Rule 45CSR30 for the purposes of Title V of the Federal Clean Air Act and the underlying applicable requirements in other state and federal rules.

This facility has been found to be subject to the following applicable rules:

Federal and State:	45CSR2	PM from Indirect Heat Exchangers
	45CSR6	Open burning prohibited.
	45CSR11	Standby plans for emergency episodes.
	45CSR13	
	WV Code § 22-5-4 (a)(14)-(15)	The Secretary can request any pertinent information such as annual emission inventory reporting.
	45CSR30	Operating permit requirement.
	45CSR34	Emission Standards for HAPs
	40 C.F.R. Part 61	Asbestos inspection and removal
	40 C.F.R. 63 Subpart ZZZZ	NESHAPs-MACT for RICE
	40 C.F.R. Part 82, Subpart F	Ozone depleting substances
State Only:	45CSR4	No objectionable odors.
	45CSR17	Control fugitive particulate matter
	45CSR22	Air Quality Management Fee Program
	45CSR42	Greenhouse Gas Emissions Inventory Program

Each State and Federally-enforceable condition of the draft Title V Operating Permit references the specific relevant requirements of 45CSR30 or the applicable requirement upon which it is based. Any condition of the draft Title V permit that is enforceable by the State but is not Federally-enforceable is identified in the draft Title V permit as such.

The Secretary's authority to require standards under 40 C.F.R. Part 60 (NSPS), 40 C.F.R. Part 61 (NESHAPs), and 40 C.F.R. Part 63 (NESHAPs MACT) is provided in West Virginia Code §§ 22-5-1 *et seq.*, 45CSR16, 45CSR34 and 45CSR30.

Active Permits/Consent Orders

Permit or Consent Order Number	Date of Issuance	Permit Determinations or Amendments That Affect the Permit (<i>if any</i>)
None	N/A	

Conditions from this facility's Rule 13 permit(s) governing construction-related specifications and timing requirements will not be included in the Title V Operating Permit but will remain independently enforceable under the applicable Rule 13 permit(s). All other conditions from this facility's Rule 13 permit(s) governing the source's operation and compliance have been incorporated into this Title V permit in accordance with the "General Requirement Comparison Table B," which may be downloaded from DAQ's website.

Determinations and Justifications

In the following discussion, the terms “current permit” or “current Title V permit” means permit R30-02100010-2006, issued on September 7, 2006, unless otherwise specifically noted.

Changes to the Operating Permit

1. **Change of Ownership & Name**

The current Title V permit names Equitable Field Services LLC as the owner and operator of the Glenville Compressor Station. Effective January 1, 2005, Equitable Field Services LLC has been disbanded and ownership of the Glenville Station was transferred to Equitrans LP. Equitrans requests an administrative amendment to name Equitrans, LP, as the owner and operator of the Glenville Station. The Title V permit application forms reflect this change and provide the appropriate owner and contact information for Equitrans, LP. Section 6 of the application narrative contains the required forms and letters for an administrative amendment as well as a certificate of merger to serve as documentation of the name change. The following table specifies the requirements for making the transfer, and how the permittee has fulfilled the requirements.

Requirement	Means of Fulfilling the Requirement
45CSR§22-4.2.a.	The application includes a signed copy of the February 9, 2011 one-page letter to the Director stating that Equitrans, LP, has purchased the Glenville Compressor Station from Equitable Field Services, LLC, on January 1, 2005. Further, the letter certifies that the permitted facility is in compliance with all of the provisions and requirements of the permit and requests that the Director acknowledge the transfer of this permit to the new owner and operator (i.e., Equitrans, LP).
45CSR§22-4.2.b.	The application includes a signed copy of the February 9, 2011 two-page letter to the Director stating that Equitrans, LP, has purchased the Glenville Compressor Station from Equitable Field Services, LLC on January 5, 2005. The letter certifies that Equitrans has obtained and reviewed a complete copy of the existing permit application and permit, and will adhere to the design and operating parameters contained in the application and comply with all terms and conditions of the permit.
45CSR§22-4.2.c.	The required fee of \$200 for a permit transfer was included with the permit application. This writer transmitted the payment check to appropriate DAQ personnel to carry out the transfer.

The following changes are therefore made in the renewal permit:

- The name is changed to “Equitrans, LP” on the:
 - permit cover;
 - top of page 1; and
 - header of each page.
- The business entity is changed from LLC to Limited Partnership on page 1.

2. **Decommissioning of Compressor Engine C-004**

The current Title V permit includes requirements for four (4) identical compressor engines (Em. Unit IDs: C-001, C-002, C-003, and C-004). According to the application, compressor engine C-004 has not been operated for many years and many integral parts of the engine have been removed to be used as spare parts for the other three compressor engines, leaving it non-operational. In technical

correspondence³, the permittee stated that they have no record of the exact month and year that C-004 ceased operation, but can confirm that it has not operated at least since 2004. As such, the permittee requests that all references and requirements pertaining to unit C-004 be removed from the Title V permit.

The current operating permit lists the compressor engine C-004 in the Emission Units table (section 1.0.). However, the only current permit requirements affecting C-004 are the facility-wide requirements of permit section 3.0., and particularly the emergency operating scenario (subsection 3.8.). Thus, the only change for the renewal will be excluding C-004 from the Emission Units table. On a more substantial level, the removal of the fourth engine will forgo the need to apply 40 C.F.R. 63 Subpart ZZZZ to C-004 in this renewal.

3. **45CSR34 – Emission Standards for Hazardous Air Pollutants, and 40 C.F.R. 63 Subpart ZZZZ - National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines**

This NESHAPs-MACT applies to stationary reciprocating internal combustion engines (RICE) at major and area sources of HAP (*cf.* 40 C.F.R. §63.6585).

The aggregate potential emissions of HAPs from the facility is 3.36 tons per year; therefore, the facility is a non-major (*i.e.*, area) source of HAPs (*cf.* §63.6585(c)).

DAQ is not taking delegation of the minor source provisions of 40 C.F.R. 63, Subpart ZZZZ. This is determined from 45CSR§34-4.1.d., which states, “Provisions under Subpart ZZZZ of 40 CFR Part 63 which apply to non-major area sources of hazardous air pollutants described in 40 CFR §63.6585(c) and (d) shall be excluded.” However, it is DAQ practice that Title V permits are to include the Subpart ZZZZ requirements for affected emission units. Such requirements will be included as a permit condition that states which emission units are subject to Subpart ZZZZ, and the compliance date. Other applicable requirements are included, but with a note specifying that they are subject to the compliance date. The following table specifies the affected emission units, the applicable rule sections, and the applicable compliance dates specified by the rule for each source.

Emission Unit ID	Description	Manufacturer Model	Subpart ZZZZ Section and Compliance Date
C-001 C-002 C-003	Existing, natural gas-fired, spark ignition (SI), 2-stroke, lean burn (2SLB), non-emergency, 300 hp reciprocating internal combustion engine/integral compressor	Clark RA-32	§63.6595(a)(1) October 19, 2013
G-001	Existing, natural gas-fired, spark ignition (SI), 4-stroke, rich burn (4SRB), non-emergency ⁴ , 147 hp ⁵ , reciprocating internal combustion engine/generator	Generac SG-100	§63.6595(a)(1) October 19, 2013

The following discussion is divided for the compressor engines and reciprocating internal combustion engine/generator. The emission units are also in separate permit sections (5 and 6, respectively) since their purposes are distinctly different, and the engine designs are not the same.

³ Email dated March 24, 2011 from Mr. Jerry McGinnis, Supervisor, Environmental for the permittee.

⁴ According to technical correspondence (3/24/2011 email from the permittee), the generator G-004 is typically only used in emergency situations but may also run in non-emergency situations. As such, the permittee has indicated that G-004 should be permitted as a non-emergency unit.

⁵ According to technical correspondence (3/24/2011 email from the permittee), the manufacturer’s specifications sheet for the generator states that it is rated for 147 hp. The current Title V permit describes the unit as being rated at 200 hp. The renewal permit will reflect the actual rating of the unit which is 147 hp.

a. Compressor Engines (Em. Unit IDs: C-001, C-002, C-003)

The following table sets out the pertinent Subpart ZZZZ requirements, and provides discussion concerning their applicability to the compressor engines and how the requirements are written in the renewal operating permit.

Section	Condition	Discussion
§63.6590(a)(1)(iii)	None	The compressor engines are affected sources, classified as <i>Existing stationary RICE</i> since they are located at an area source of HAP emissions and were constructed before June 12, 2006.
§63.6595(a)(1)	5.1.1.	The condition has been written for the applicable Subpart ZZZZ compliance date, which is in the last sentence of §63.6595(a)(1). The rule language has been modified for insertion into the permit only to exclude the non-applicable part concerning SI RICE located at major sources. In accordance with 45CSR§34-4.1.d., the state rule is not cited for this condition since the area source provisions of Subpart ZZZZ are excluded from 45CSR34.
§63.6603(a)	5.1.2.	This section applies to existing stationary RICE located at an area source of HAP emissions, refers to Tables 2d and 2b to Subpart. None of the requirements in Table 2b apply to the compressor engines. The applicable requirements of Table 2d are those for non-emergency, non-black start 2SLB stationary RICE, which are given in the permit condition. The language of the permit condition is taken from the header row and row 6 of Table 2d of Subpart ZZZZ. The last part of the requirement from Table 2d states, “after which time the non-startup emission limitations apply.” Since there are no applicable emission limitations for the compressor engines, this language will be not included in the last sentence of the condition. The footnote regarding the optional oil analysis program is part of the permit condition. The reference in the rule’s footnote has been corrected for the permit to refer to §63.6625(j), which is the applicable section for SI engines (Note that §63.6625(i) is for CI engines, and does not strictly apply to all requirements in Table 2d that reference the footnote).
§63.6604	None	This section does not apply since it pertains to compression ignition engines, and the permittee’s engines are spark ignition.
§63.6605	None	While this section is broad and general in its scope, it does not, however, apply to the compressor engines since there are no applicable emission limitations or operating limitations for these units.
§63.6612(a)	None	This section is an applicable requirement that references Tables 4 and 5 of Subpart ZZZZ. However, none of the requirements in Tables 4 or 5 apply since they pertain to RICE that are subject to pollutant emission limitations or reductions. Therefore, this section does not apply to the engines.
§63.6615	None	This section does not apply since the engines are not subject to emission and operating limitations.
§63.6620	None	This section does not apply since the engines are not subject

Section	Condition	Discussion
		to emission and operating limitations.
§§63.6625(a) and (b)	None	These sections do not apply since the engines are not subject to requirements under Table 5 to Subpart ZZZZ (see discussion above concerning §63.6612(a)).
§63.6625(c)	None	This section does not apply since the engines do not fire landfill gas or digester gas.
§63.6625(d)	None	This section does not apply since the engines are located at an area source.
§63.6625(e)(5)	5.1.3.	This section is applicable since the engines meet the criteria given in that section. Therefore, the condition has been created to embody the maintenance plan requirement of §63.6625(e).
§63.6625(h)	5.1.2.	This section is applicable, and is actually part of the requirement in §63.6603(a) – Table 2d. Therefore, this section is also cited with condition 5.1.2.
§63.6625(i)	None	This section does not apply since it pertains to compression ignition engines, and the permittee's engines are spark ignition.
§63.6625(j)	5.3.1.	This section is an applicable option to the oil change requirements of §63.6603(a) – Table 2d, Item 6. The language of this section has been written as a permit condition and modified to reference only item 6 of Table 2d to Subpart ZZZZ.
§63.6625(k)	None	This section does not apply since there is no applicable operating limitation that requires use of a temperature measuring device for any of the permittee's engines.
§§63.6630, 63.6635, 63.6640	None	These sections do not apply since the engines are not subject to emission and operating limitations.
§63.6645(a)(5)	None	This section provides an exemption to the notification requirements (including the NOCS under 40 C.F.R. §63.9(h)) for an existing stationary RICE that is not subject to any numerical emission standards. Since the engines are not subject to Subpart ZZZZ numerical emission standards, the notifications under §63.6645 do not apply.
§§63.6645(g) and (h)	None	These sections are not applicable to the engines since no performance test under Subpart ZZZZ is required.
§§63.6650(a) and (b)	None	These sections do not apply since the engines meet none of the criteria in Table 7.
§63.6650(c)	None	This section does not apply since it pertains to Compliance Reports (which the permittee does not have to submit since §63.6650(b) does not apply).
§§63.6650(d) and (e)	None	These sections do not apply since there are no applicable Subpart ZZZZ emission limitations or operating limitations, and a CMS is not employed.
§63.6650(f)	5.5.1.	This section is an applicable requirement to report deviations (as defined in 40 C.F.R. §63.6675). This requirement is modified for insertion to the permit.
§63.6650(g)	None	This section does not apply since it pertains to new or reconstructed stationary RICE which fire landfill gas or digester gas.

Section	Condition	Discussion
§63.6655(d)	5.1.4.	This section is applicable, and in Table 6 to Subpart ZZZZ, item 9 provides the applicable requirements for an existing, non-emergency 2SLB stationary RICE located at an area source of HAP to demonstrate continuous compliance.
§63.6655(e)(3)	5.4.1.	This section applies to the compressor engines.
§63.6655(f)	None	This section does not apply since it pertains to emergency stationary RICE.
§63.6660	5.4.2.	This section applies to the Subpart ZZZZ records, and is applicable to the recordkeeping of §63.6655(e).

b. Reciprocating engine/generator (Em. Unit ID: G-001)

The following table sets out the pertinent Subpart ZZZZ requirements, and provides discussion concerning their applicability to the reciprocating engine/generator and how the requirements are written in the renewal operating permit.

Section	Condition	Discussion
§63.6590(a)(1)(iii)	None	The engine is an affected source, classified as <i>Existing stationary RICE</i> since it is located at an area source of HAP emissions and was constructed before June 12, 2006.
§63.6595(a)(1)	6.1.1.	The condition as been written for the applicable Subpart ZZZZ compliance date, which is in the last sentence of §63.6595(a)(1). The rule language has been modified for insertion into the permit only to exclude the non-applicable part concerning SI RICE located at major sources. In accordance with 45CSR§34-4.1.d., the state rule is not cited for this condition since the area source provisions of Subpart ZZZZ are excluded from 45CSR34.
§63.6603(a)	6.1.2.	This section applies to existing stationary RICE located at an area source of HAP emissions, refers to Tables 2d and 2b to Subpart. None of the requirements in Table 2b apply to G-001 since it is 4SRB. The applicable requirements of Table 2d are those for non-emergency, non-black start 4SRB stationary RICE ≤500HP. The language of the permit condition is taken from the header row and row 9 of Table 2d of Subpart ZZZZ. The last part of the requirement from Table 2d states, “after which time the non-startup emission limitations apply.” Since there are no applicable emission limitations for the compressor engines, this language will be not included in the last sentence of the condition. The footnote regarding the optional oil analysis program is part of the permit condition. The reference in the rule’s footnote has been corrected for the permit to refer to §63.6625(j), which is the applicable section for SI engines (Note that §63.6625(i) is for CI engines, and does not strictly apply to all oil change frequency requirements in Table 2d that reference the footnote).
§63.6604	None	This section does not apply since it pertains to compression ignition engines, and the permittee’s engine is spark ignition.
§63.6605	None	While this section is broad and general in its scope, it does not, however, apply to G-001 since there are no applicable emission limitations or operating limitations for this unit.

Section	Condition	Discussion
§63.6612(a)	None	This section is an applicable requirement that references Tables 4 and 5 of Subpart ZZZZ. However, none of the requirements in Tables 4 or 5 apply since they pertain to RICE that are subject to pollutant emission limitations or reductions. Therefore, this section does not apply to the engine.
§63.6615	None	This section does not apply since the engines are not subject to emission and operating limitations.
§63.6620	None	This section does not apply since the engines are not subject to emission and operating limitations.
§§63.6625(a) and (b)	None	These sections do not apply since the engines are not subject to requirements under Table 5 to Subpart ZZZZ (see discussion above concerning §63.6612(a)).
§63.6625(c)	None	This section does not apply since the engines do not fire landfill gas or digester gas.
§63.6625(d)	None	This section does not apply since the engines are located at an area source.
§63.6625(e)(8)	6.1.3.	This section is applicable since the engines meet the criteria given in that section. Therefore, the condition has been created to embody the maintenance plan requirement of §63.6625(e).
§63.6625(h)	6.1.2.	This section is applicable, and is actually part of the requirement in §63.6603(a) – Table 2d. Therefore, this section is also cited with condition 6.1.2.
§63.6625(i)	None	This section does not apply since it pertains to compression ignition engines, and the permittee's engine is spark ignition.
§63.6625(j)	6.3.1.	This section is an applicable option to the oil change requirements of §63.6603(a) – Table 2d, Item 9. The language of this section has been written as a permit condition and modified to reference only item 9 of Table 2d to Subpart ZZZZ.
§63.6625(k)	None	This section does not apply since there is no applicable operating limitation that requires use of a temperature measuring device for the permittee's engine.
§§63.6630, 63.6635, 63.6640	None	These sections do not apply since the engines are not subject to emission and operating limitations.
§63.6645(a)(5)	None	This section provides an exemption to the notification requirements (including the NOCS under 40 C.F.R. §63.9(h)) for an existing stationary RICE that is not subject to any numerical emission standards. Since the engines are not subject to Subpart ZZZZ numerical emission standards, the notifications under §63.6645 do not apply.
§§63.6645(g) and (h)	None	These sections are not applicable to the engines since no performance test under Subpart ZZZZ is required.
§§63.6650(a) and (b)	None	These sections do not apply since the engine meets none of the criteria in Table 7.
§63.6650(c)	None	This section does not apply since it pertains to Compliance Reports (which the permittee does not have to submit since §63.6650(b) does not apply).
§§63.6650(d) and	None	These sections do not apply since there are no applicable

Section	Condition	Discussion
(e)		Subpart ZZZZ emission limitations or operating limitations, and a CMS is not employed.
§63.6650(f)	6.5.1.	This section is an applicable requirement to report deviations (as defined in 40 C.F.R. §63.6675). This requirement is modified for insertion into the permit.
§63.6650(g)	None	This section does not apply since it pertains to new or reconstructed stationary RICE which fire landfill gas or digester gas.
§63.6655(d)	6.1.4.	This section is applicable, and in Table 6 to Subpart ZZZZ, item 9 provides the applicable requirements for an existing, non-emergency 4SRB stationary RICE ≤500 HP located at an area source of HAP to demonstrate continuous compliance.
§63.6655(e)(3)	6.4.1.	This section applies to the engine.
§63.6655(f)	None	This section does not apply since it pertains to emergency stationary RICE.
§63.6660	6.4.2.	This section applies to the Subpart ZZZZ records, and is applicable to the recordkeeping of §63.6655(e).

4. **45CSR2 – To Prevent and Control Particulate Air Pollution from Combustion of Fuel in Indirect Heat Exchangers.** This rule applies to the 1.25 MMBtu/hr-rated heating boiler (BLR01), and current permit condition 4.1.1. sets forth the applicable 10% opacity limit from 45CSR§2-3.1. The fact sheet for the current permit states, “According to 45CSR§2-11, BLR01 is exempt from 45CSR2 MRR (monitoring, recordkeeping, and reporting) requirements because the heat input to BLR01 is less than ten (10) million BTUs per hour.” The following table sets out the pertinent sections of 45CSR2 for further analysis.

Rule Section	Rule Language
45CSR§2-3.1.	No person shall cause, suffer, allow or permit emission of smoke and/or particulate matter into the open air from any fuel burning unit which is greater than ten (10) percent opacity based on a six minute block average.
45CSR§2-3.2.	Compliance with the visible emission requirements of subsection 3.1 shall be determined in accordance with 40 CFR Part 60, Appendix A, Method 9 or by using measurements from continuous opacity monitoring systems approved by the Director.
45CSR§2-8.1.a.	The owner or operator of a fuel burning unit(s) shall demonstrate compliance with section 3 by periodic testing in accordance with 40 CFR Part 60, Appendix A, Method 9, or a certified continuous opacity monitoring system, as approved by the Director....
45CSR§2-11.1.	Any fuel burning unit(s) having a heat input under ten (10) million B.T.U.'s per hour will be exempt from sections 4, 5, 6, 8 and 9. However, failure to attain acceptable air quality in parts of some urban areas may require the mandatory control of these sources at a later date.

The language of 45CSR§2-3.1. specifies the opacity limitation that applies to BLR01, and it set forth as permit condition 4.1.1.

The language of 45CSR§2-3.2. specifies the two acceptable means of demonstrating compliance with the opacity limit, but *does not require* that Method 9 tests be performed or that a COMS be installed and utilized. This subsection only prescribes the methods.

The language of 45CSR§2-8.1.a. would be the requirement to perform testing (i.e., Method 9) or employ a COMS. When applicable, this subsection *requires* the testing or COMS utilization.

The language of 45CSR§2-11.1. is an exemption to sections 4 (weight emission standards), 5 (fugitive PM), 6 (registration), 8 (testing and MRR) and 9 (startups, shutdowns, malfunctions) of 45CSR2 for units less than 10 MMBtu/hr design heat input (DHI).

Since BLR01 meets the exemption criteria, it is not subject to monitoring in 45CSR§2-8, which is also consistent with the current Title V permit.

5. **45CSR42 – Greenhouse Gas Emissions Inventory Program.** The applicable requirements of this rule have been incorporated into the renewal permit as conditions 3.1.10. and 3.5.10.
6. **Miscellaneous Changes**
 - a. The format of the table of contents has been revised to match current “boilerplate”.
 - b. The emission point ID has been changed from “C-0031” to “C-003” in permit subsection 1.1. According to technical correspondence⁶, the current operating permit (as well as the 1997 operating permit) describe the emission unit ID and emission point ID of the third compressor engine as C-003 and C-0031, respectively. It appears that that C-0031 is a typographical error that has been carried through for several years.
 - c. The language of conditions 3.1.1. and 3.1.2. has been revised to match current language of 45CSR6.
 - d. The citation of authority for condition 3.1.3. has been updated since 45CSR15 has been repealed and 45CSR34 now adopts 40 C.F.R. Part 61.
 - e. Condition 3.3.1.d. has been added to the Title V “boilerplate” and the citation of authority has been revised.
 - f. The language of conditions 3.5.3. and 3.5.5. has been revised to account for the requirement to submit the annual certification to the USEPA in electronic format only.

Non-Applicability Determinations

The following requirements have been determined not to be applicable to the subject facility due to the following:

- a. **40 C.F.R. 60 Subparts D, Da, Db, and Dc.** These subparts apply to steam generating units of various sizes, all greater than 10 MMBtu/hr. The Glenville Compressor Station does not have any steam generating units greater than 10 MMBtu/hr; therefore, the requirements of NSPS Subparts D, Da, Db, and Dc do not apply.
- b. **40 C.F.R. 60 Subparts K, Ka, Kb.** These subparts apply to storage tanks of certain sizes constructed, reconstructed, or modified during various time periods. Subpart K applies to storage tanks constructed, reconstructed, or modified after 1973 and prior to 1978, and subpart Ka applies to those constructed, reconstructed, or modified after 1978 and prior to 1984. Both subparts K and Ka apply to storage tanks with a capacity greater than 40,000 gallons. Subpart Kb applies to volatile organic liquid (VOL) storage tanks constructed, reconstructed, or modified after July 23, 1984 with a capacity equal to or greater than 75 m³ (~19,813 gallons). Both tanks (Em. Unit IDs: *Tank 1*, *Tank 2*) at the Glenville Compressor Station have a capacity of 4,000 gallons. As such, NSPS Subparts K, Ka, and Kb do not apply to the storage tanks *Tank 1* and *Tank 2* at the Glenville Compressor Station.
- c. **40 C.F.R. 60 Subpart KKK – Standards of Performance for Equipment Leaks of VOC from Onshore Natural Gas Processing Plants.** According to 40 C.F.R. §60.631, a *Natural gas processing plant* (gas plant) means any processing site engaged in the extraction of natural gas liquids from field gas, fractionation of mixed natural gas liquids to natural gas products, or both. Although this subpart includes requirements for compressors and storage tanks, it only applies to those units located at a processing plant as defined by the rule. The operations at the Glenville Compressor Station do not

⁶ Email dated March 24, 2011 from Mr. Jerry McGinnis, Supervisor, Environmental for the permittee.

meet the definition of a *Natural gas processing plant*. Therefore, the requirements of this subpart do not apply to the emission units at the Glenville Compressor Station.

- d. **40 C.F.R. 60 Subpart LLL – Standards of Performance for Onshore Natural Gas Processing: SO₂ Emissions.** This subpart applies to each sweetening unit, and each sweetening unit followed by a sulfur recovery unit, at a natural gas processing plant. The Glenville Compressor Station does not meet the definition of a natural gas processing facility, nor does the station include a sweetening unit. Therefore, the requirements of this subpart do not apply.
- e. **40 C.F.R. 60 Subpart IIII – Standards of Performance for Stationary Compression Ignition Internal Combustion Engines.** This subpart applies to manufacturers, owners, and operators of stationary compression ignition internal combustion engines that have been constructed, reconstructed, or modified after various dates, the earliest of which is July 11, 2005. All of the engines (C-001, C-002, C-003, G-001) at the Glenville Compressor Station are spark ignition IC engines, and therefore the requirements of this subpart do not apply.
- f. **40 C.F.R. 60 Subpart JJJJ – Standards of Performance for Stationary Spark Ignition Internal Combustion Engines.** This subpart applies to manufacturers, owners, and operators of stationary spark ignition internal combustion engines that have been constructed, reconstructed, or modified after various dates, the earliest of which is June 12, 2006. All of the engines at the Glenville Compressor Station were installed prior to 2006 (latest installation date is 1984 for G-001) and have not been modified or reconstructed, and therefore the requirements of this subpart do not apply.
- g. **40 C.F.R. Part 63 Subpart HH – National Emission Standards for Hazardous Air Pollutants from Oil and Natural Gas Production Facilities.** According to 40 C.F.R. §63.760, Subpart HH is applicable to emission points that "are located at oil and natural gas production facilities that meet the specified criteria". A facility must either process, upgrade, or store hydrocarbon liquids prior to the point of custody transfer (§63.760(a)(2)) or process, upgrade or store natural gas prior to the point which natural gas enters the natural gas transmission and storage source category or is delivered to a final end user (§63.760(a)(3)). The Glenville Station is considered a natural gas gathering station, and is located prior to the point of custody transfer. However, the Glenville Station is a minor source of HAP, and as such the potentially-affected sources regulated by Subpart HH are TEG dehydration units (§63.760(b)(2)). Since the Glenville Station does not have any such dehydration units, this rule does not apply.
- h. **40 C.F.R. Part 63 Subpart HHH - National Emission Standards for Hazardous Air Pollutants From Natural Gas Transmission and Storage Facilities.** According to §63.1270(a) "This subpart applies to owners and operators of natural gas transmission and storage facilities that transport or store natural gas prior to entering the pipeline to a local distribution company or to a final end user (if there is no local distribution company), and that are major sources of hazardous air pollutants (HAP) emissions as defined in §63.1271." Specifically, §63.1270(b) states that the affected source is each glycol dehydration unit. The Glenville Compressor Station is a minor source of HAPs, and does not have a dehydration unit. Therefore, the requirements of this subpart do not apply.
- i. **40 C.F.R. Part 64 – Compliance Assurance Monitoring.** According to the renewal application the engines (C-001, C-002, and C-003), boiler (BLR01), generator (G-001), and tanks (Tank 1, Tank 2) do not have any control devices. Since no emission unit meets the applicability criterion at 40 C.F.R §64.2(a), CAM is not applicable to these sources.
- j. **45CSR10 – To Prevent and Control Air Pollution from the Emission of Sulfur Oxides.** The fact sheet for permit R30-02100010-2006 stated the following: "According to 45CSR§10-10.1, BLR01 is exempt from 45CSR10 MRR (monitoring, recordkeeping, and reporting) requirements because the heat input to BLR01 is less than ten (10) million BTUs per hour." The exemption at 45CSR§10-10.1.

specifically states, “Any fuel burning units having a design heat input under ten (10) million BTU's per hour will be exempt from section 3 and sections 6 through 8.” Rule section 4 and 5 are not covered by this exemption. 45CSR§10-4 sets SO₂ limits from source operations. First, 45CSR§10-4 does not apply to BLR01 because it is not a “source operation” as defined in 45CSR§10-2.19. 45CSR§10-5.1. prohibits combustion of refinery process gas streams or other process gas streams that contain certain concentrations of hydrogen sulfide. 45CSR§10-5.2. pertains to by-product coke operations. The permittee’s source BLR01 is not subject to either of these subsections; therefore, 45CSR§10-5 does not apply to BLR01. Finally, according to the fact sheet for permit R30-02100010-2006, prior to the issuance of permit R30-02100010-2006, DAQ determined that 45CSR10 is not applicable to the compressor engines.

- k. **40 C.F.R. 63 Subpart DDDDD – National Emission Standards for Hazardous Air Pollutants for Major Sources: Industrial, Commercial, and Institutional Boilers and Process Heaters.** The facility is a non-major source of HAP; therefore, this rule does not apply to the Heating Boiler (BLR01).
- l. **40 C.F.R. 63 Subpart JJJJJ – National Emission Standards for Hazardous Air Pollutants for Area Sources: Industrial, Commercial, and Institutional Boilers.** According to 40 C.F.R. §63.11195(e), a gas-fired boiler as defined in §63.11237 is not subject to this subpart and to any requirements of this subpart. The definition states that a “*Gas-fired boiler* includes any boiler that burns gaseous fuels not combined with any solid fuels, burns liquid fuel only during periods of gas curtailment, gas supply emergencies, or periodic testing on liquid fuel. Periodic testing of liquid fuel shall not exceed a combined total of 48 hours during any calendar year.” The gas-fired Heating Boiler (BLR01) combusts only natural gas, and does not combust solid or liquid fuels. Therefore, the Heating Boiler (BLR01) meets the exemption in §63.11195(e) and this rule does not apply.
- m. **Prevention of Significant Deterioration and Title V Greenhouse Gas Tailoring Rule.** The facility has not made any changes that trigger a PSD modification; therefore, the requirements of the GHG tailoring rule are non-applicable.

Request for Variances or Alternatives

None.

Insignificant Activities

Insignificant emission unit(s) and activities are identified in the Title V application.

Comment Period

Beginning Date: April 28, 2011
Ending Date: May 31, 2011

All written comments should be addressed to the following individual and office:

Denton B. McDerment, P.E.
Title V Permit Engineer
West Virginia Department of Environmental Protection
Division of Air Quality
601 57th Street SE
Charleston, WV 25304

Procedure for Requesting Public Hearing

During the public comment period, any interested person may submit written comments on the draft permit and may request a public hearing, if no public hearing has already been scheduled. A request for public hearing shall be in writing and shall state the nature of the issues proposed to be raised in the hearing. The Secretary shall grant such a request for a hearing if he/she concludes that a public hearing is appropriate. Any public hearing shall be held in the general area in which the facility is located.

Point of Contact

Denton B. McDerment, P.E.
West Virginia Department of Environmental Protection
Division of Air Quality
601 57th Street SE
Charleston, WV 25304
Phone: 304/926-0499 ext. 1221 • Fax: 304/926-0478

Response to Comments (Statement of Basis)

Public Comments

None.

U.S. EPA Comments

None.

Other Changes

During the public comment period, the permit writer noticed that a non-applicability determination for the Greenhouse Gas Tailoring Rule was not included in the draft permit. The determination has been added in the final permit (section 3.7.2.m.) and fact sheet.